Grid-Connected PV Capacity (kW) Installed in California

California Energy Commission*	23,355
Sacramento Municipal Utility District	11,322
Los Angeles Department of Water and Power	7,281
California Public Utilities Commission*	6,497
Pre-1998	1,918
City of Riverside Public Utilities	379
City of Anaheim Public Utilities	261
City of Palo Alto Utilities	234
City of Roseville Electric	93
City of Pasadena Water and Power	84
City of Santa Clara Electric Utility	54
City of Glendale Water and Electric	19
Pacific Power	19
City of Burbank Water and Power	7
City of Ukiah Public Utilities	7
City of Alameda Power and Telecom	5
City of Lodi Electric Utility	4
City of Redding Electric Utility	2

51,538	kW
כ	1,538

51.54 MW

This analysis tracks the capacity of grid-connected PV installations in California from 1981 until the present. The vast majority of the early installations can be attributed to the work done by the Sacramento Municipal Utility District (SMUD). Beginning in 1998, the Energy Commission's Emerging Renewables ("Buydown") Program began offering rebates for grid-connected "emerging" systems in the service territories of the three largest Investor Owned Utilities (IOUs) - PG&E, SCE and SDG&E. In 2001, the Public Utilities Commission began the Self-Generation Incentive Program. The "Self-Gen" Program also offers rebates, but the program is administered by the utilities (PG&E, SCE, SDG&E and SCGC) directly. The Los Angeles Department of Water and Power (LADWP), as well as many of the smaller utilities, offer there own incentive programs.

^{*} The Energy Commission's Emerging Renewable Program is open to the ratepayers of PG&E, SCE and SDG&E. The Public Utilities Commission's Self-Generation Incentive Program is open to the ratepayers of PG&E, SCE, SDG&E and the SCGC.

Grid-Connected PV Capacity Installed in California

YEAR

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003**	Total	
Program																									
Sacramento Municipal Utility District	0	0	0	1,230	0	1.230	0	0	0	0	0	23	495	675	561	421	405	236	1.220	1,446	1.679	1,390	311	11.322	
California Energy Commission*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	619	726	4,036	8,108	9,685	23,355	
Pacific Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	360	487	2,041	4,949	5,883		13,780
Southern California Edison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	250	133	1,120	2,116	2,439		6,178
San Diego Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	106	866	1,042	1,354		3,378
Bear Valley Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	9		19
Los Angeles Department of Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	432	589	2,573	3,585	7,281	
California Public Utilities Commission*																					0	1,859	4,638	6,497	
Pacific Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,671	2,125		3,796
Southern California Edison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	1,551		1,665
San Diego Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	962		1,036
***Southern California Gas Company	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Pre-1998	37	38	11	12	15	63	-	4	59	15	17	477	806	(336)	(250)	378	110	464	-	-	-	-	-	1,918.08	
City of Palo Alto Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	101	74	27	234	
City of Santa Clara Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	34	14	4	54	
City of Pasadena Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	0	84	
City of Burbank Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	3	0	7	
City of Anaheim Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141	84	35	261	
City of Redding Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
City of Glendale Water and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	19	
City of Riverside Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	15	214	379	
City of Roseville Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	54	29	93	
Pacific Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	9	0	19	
City of Alameda Power and Telecom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	
City of Ukiah Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	7	
City of Lodi Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	
TOTAL Cumulative Total	37 37	38 75	11 86	1,242 1,328	15 1,342	1,293 2,635	0 2,635	4 2,639	59 2,698	15 2,713	17 2,730	500 3,230	1,301 4,530	339 4,869	311 5,180	799 5,980	515 6,494	885 7,379	1,971 9,350	2,622 11,971	6,744 18,715	14,294 33,009	18,529 51,538	51,538	

NOTES

* The Energy Commission's Emerging Renewable Program is open to the ratepayers of PG&E, SCE and SDG&E. The Public Utilities Commission's Self-Generation Incentive Program is open to the ratepayers of PG&E, SCE, SDG&E and the SCGC.

** The 2003 data is current as of September/October 2003.

*** The Southern California Gas Company (SCGC) has paid on over 1 MW of PV. However, the Gas Company has overlapping territory with several electric utilities that are reporting on the same projects. For projects that have participated in multiple programs with the Gas Company, the totals will be reported by electric utilities. Projects that have only participated in the Gas Company rebate program will be reported under the Gas Company header.

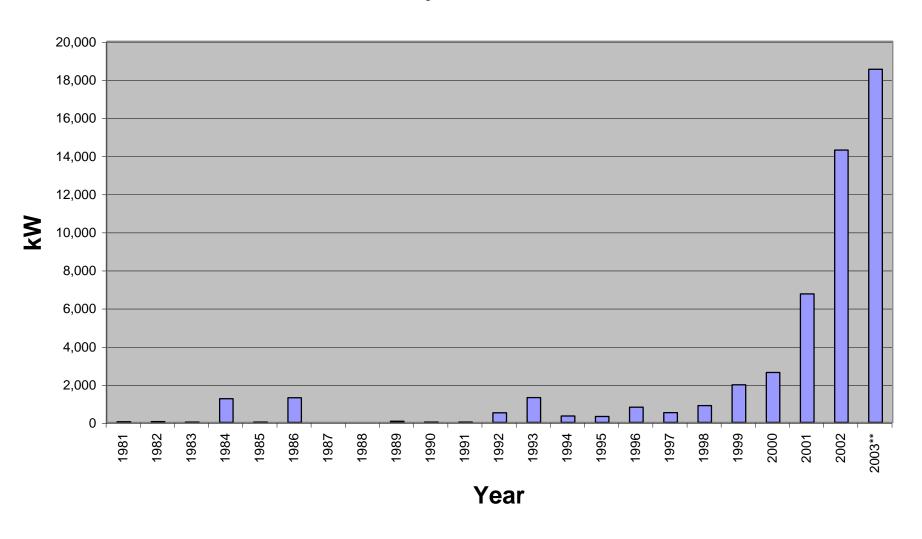
"Pre-1998" Row: These numbers were derived by subtracting the total kW installed by SMUD each year from the totals contained in Appendix A of the 2001 EPRI Report titled "California Renewable Technology Market and Benefits Assessment." In some years, there is a negative number. This obviously did not happen. To be consistent with the EPRI data, it was decided to keep the negative number rather than make more assumptions. Similarly, when determining the number of systems by year, the results showed negative numbers. Again, to be consistent with the EPRI data, it was decided to keep the negative number rather than make more assumptions.

In some cases, the 2002 totals for the smaller utilities reflect the cumulative total of all PV installed, not just the 2002 total.

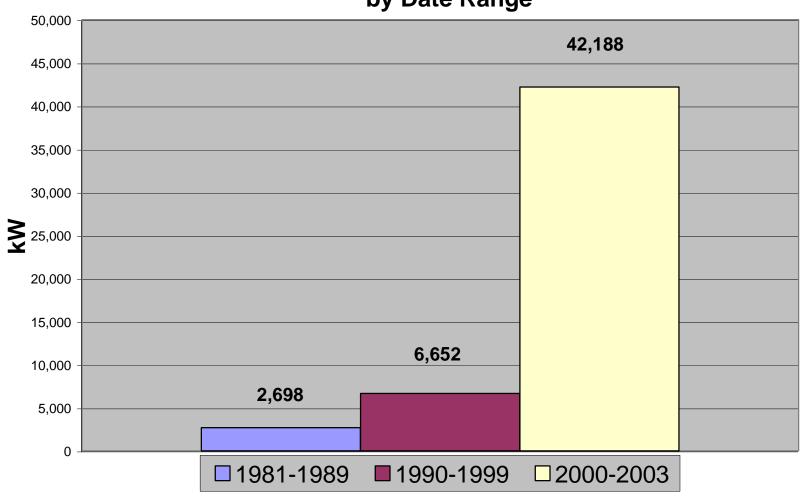
Many of the utilities contacted had, at one time, a solar rebate program. It is possible other utilities have rebate programs, or other utilities may have installed PV, but those are not accounted for in this summary.

The Energy Commission numbers do not include any Publicly Owned Electric Utility installed systems. The Energy Commission has paid for 309 kW of these systems. However, to avoid double counting, these numbers were subtracted from the yearly totals.

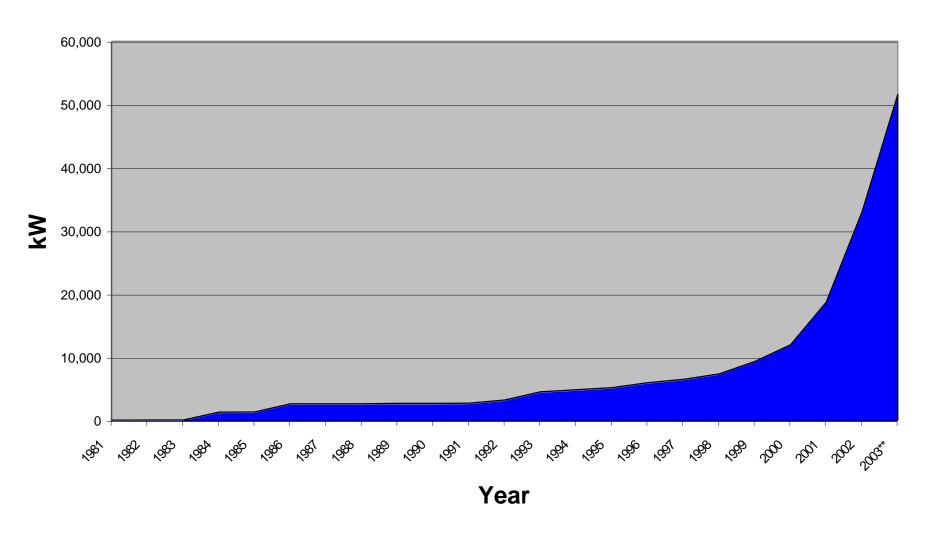
Grid-Connected PV Capacity Installed in California By Year



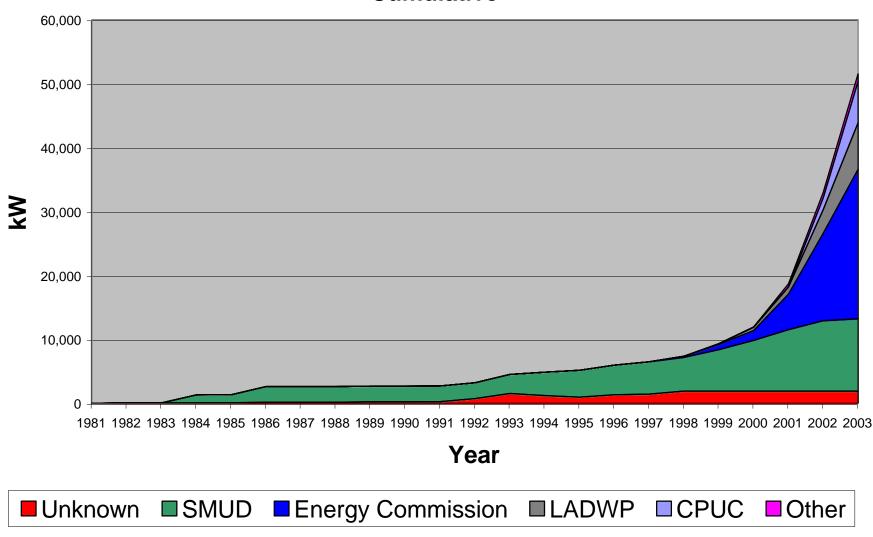
Grid-Connected PV Capacity Installed in California by Date Range



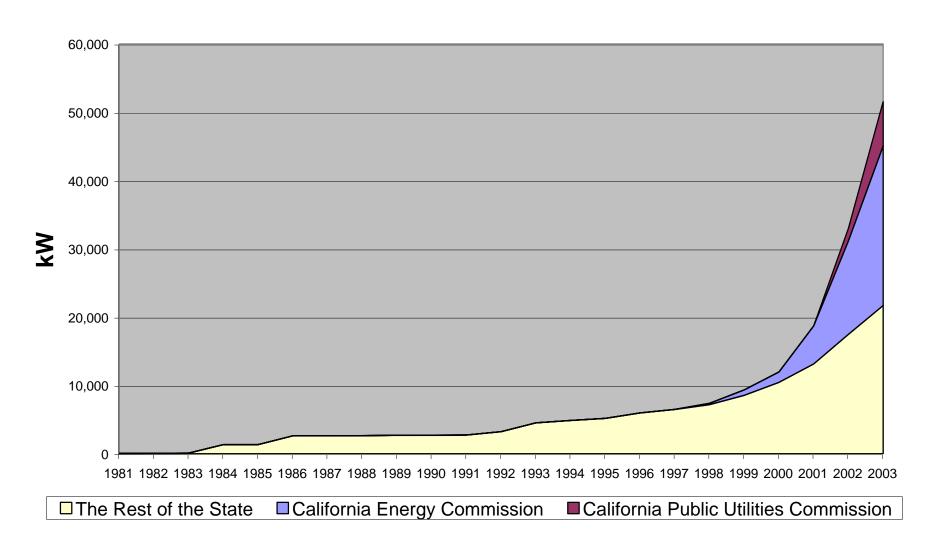
Grid-Connected PV Capacity Installed in California Cumulative



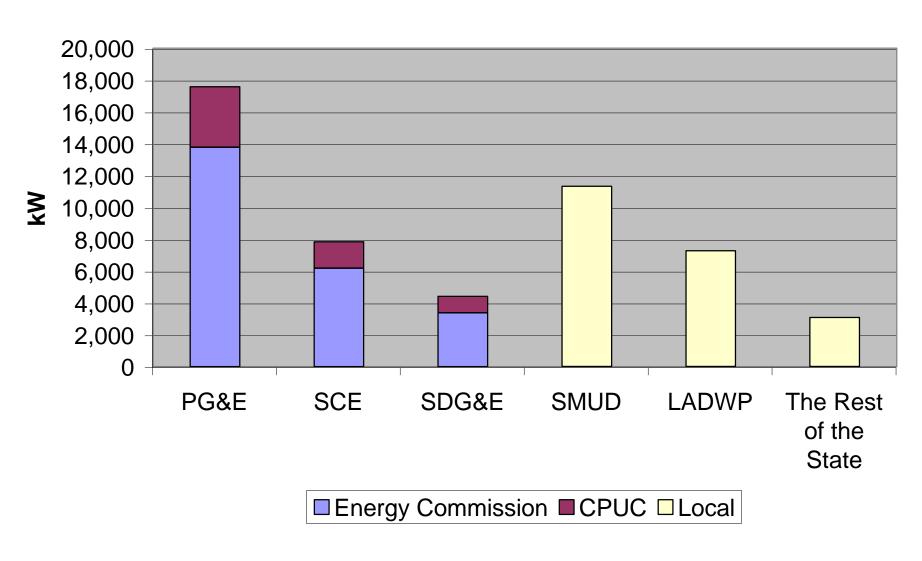
Grid-Connected PV Capacity Installed in California Cumulative



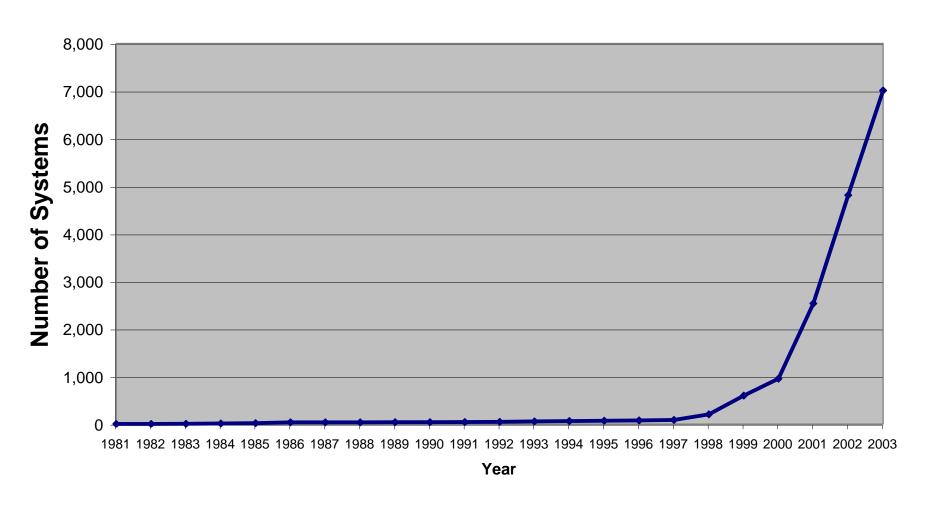
Grid-Connected PV Capacity Installed in California Cumulative



Grid-Connected PV Capacity Installed in California by Service Territory



Number of Grid-Connected PV Systems Installed In California Cumulative



Grid-Connected PV Program Contacts in California

Program	Contact	Telephone	Email
California Energy Commission*	Dale Trenschel	916-653-2834	Dtrensch@energy.state.ca.us
	1	1	1
California Public Utilities		445 700 0505	
Commission*	John Galloway	415-703-2565	jhg@cpuc.ca.gov
	Dean Heatherington	415-973-2362	selfgen@pge.com
	Howard Green	626-302-8436	greenh@sce.com
	Mike Magee	858-244-1177	selfgen@sdenergy.org
SUGU	Marshall Kiyohiro	213-244-5619	selfgeneration@socalgas.com
Sacramento Municipal Utility			
District	Stephen Frantz	916-732-5107	SFrantz@smud.org
District	Otophon Frank	010 702 0107	or rame contactory
Los Angeles Department of Water and Power	Thomas Honles	213-367-3151	thomas.honles@ladwp.com
City of Palo Alto Utilities	Lindsay Joye	650-329-2241	pvpartners@cityofpaloalto.org
,			proparation of only of paraticles of
City of Santa Clara Electric Utility	Leslie Brown	408-244-SAVE	lbrown@ci.santa-clara.ca.us
-	•		1
City of Pasadena Water and Power	Mauricio Mejia	626-744-6970	mmejia@ci.pasadena.ca.us
City of Burbank Water and Power	John Joyce	818-238-3653	jjoyce@ci.burbank.ca.us
City of Anaheim Public Utilities	Dina Predisik	714-765-4182	dpredisik@anaheim.net
City of Redding Electric Utility	Pam Brady-Koss	530-339-7215	pbradykoss@reddingelectricutility.com
City of Glendale Water and Electric	Ned Bassin	818-548-2748	nbassin@ci.glendale.ca.us
City of Riverside Public Utilities	Atoya Mendez	909-826-5790	amendez@ci.riverside.ca.us
City of Roseville Electric	Pat Morrison	916-774-5624	pmorrison@roseville.ca.us
Pacific Power	Michael Reid	503-813-6052	michael.reid@pacificorp.com
City of Alameda Power and Telecom	Don Rushton	510-748-3946	drushton@alamedapt.com
City of Ukiah Public Utilities	Cindy Sauers	707-463-6295	cindys@cityofukiah.com
City of Lodi Electric Utility	Rob Lechner	209-333-6800 x 2583	rlechner@lodielectric.com

Grid-Connected PV Program Alternate Contacts in California

Program		Contact	Telephone	Email								
California Energy Commi	ission*	Todd Lieberg	916-654-4059	tlieberg@energy.state.ca.us								
California Public Utilit	ties											
Commission*		John Galloway	415-703-2565	jhg@cpuc.ca.gov								
PG&	E	Sara Burmingham	415-973-5187	sebb@pge.com								
SCE		Robert Thomas	626-302-1746	robert.thomas@sce.com								
SDG	&E	Scott Anders	858-244-1177	san@sdenergy.org								
SCG	С	Tony Prietto	213-244-3679	aprieto@semprautilities.com								
Sacramento Municipal Utilit	y District	Stephen Frantz	916-732-5107	SFrantz@smud.org								
Los Angeles Department of and Power	of Water	Darryl Gordon	213-367-3250	dgord1@ladwp.com								
City of Palo Alto Utilit	ies	Lindsay Joye	650-329-2241	pvpartners@cityofpaloalto.org								
only of Full And Online		Elitabay boyo	000 020 22-11	pypartiologokyolpaloako.org								
City of Santa Clara Electri	c Utility	Leslie Brown	408-244-SAVE	lbrown@ci.santa-clara.ca.us								
City of Pasadena Water an	d Power	Mauricio Mejia	626-744-6970	mmejia@ci.pasadena.ca.us								
City of Burbank Water and	d Power	John Joyce	818-238-3653	jjoyce@ci.burbank.ca.us								
City of Anaheim Public U	Itilities	Dina Predisik	714-765-4182	dpredisik@anaheim.net								
City of Redding Electric	Utility	Pam Brady-Koss	530-339-7215	pbradykoss@reddingelectricutility.com								
City of Glendale Water and	Electric	Ned Bassin	818-548-2748	nbassin@ci.glendale.ca.us								
City of Riverside Public U	Jtilities	Atoya Mendez	909-826-5790	amendez@ci.riverside.ca.us								
City of Roseville Elect	tric	Pat Morrison	916-774-5624	pmorrison@roseville.ca.us								
Pacific Power		Michael Reid	503-813-6052	michael.reid@pacificorp.com								
City of Alameda Power and	Telecom	Don Rushton	510-748-3946	drushton@alamedapt.com								
City of Ukiah Public Uti	lities	Cindy Sauers	707-463-6295	cindys@cityofukiah.com								
City of Lodi Electric Ut	tility	Rob Lechner	209-333-6800 x 2583	rlechner@lodielectric.com								

Grid-Connected PV Capacity in California

Graphing Data

YEAR

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total	
Program																									
Sacramento Municipal Utility District	0	0	0	1,230	0	1.230	0	0	0	0	0	23	495	675	561	421	405	236	1,220	1,446	1.679	1,390	311	11.322	
California Energy Commission*	0	0	0	0	0	0	o	o	0	0	0	0	0	0	0	0	0	181	619	726	4,036	8,108	9,685	23,355	
Pacific Gas and Electric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	360	487	2,041	4,949	5,883		3,780
Southern California Edison San Diego Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120 0	250 10	133 106	1,120 866	2,116 1,042	2,439 1,354		6,178 3,378
Bear Valley Electric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	9	3	19
Los Angeles Department of Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	432	589	2,573	3,585	7,281	
California Public Utilities Commission* Pacific Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,859 1,671	4,638 2,125	6,497	3,796
Southern California Edison		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	1,551		1,665
San Diego Gas and Electric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	962	1	1,036
***Southern California Gas Company Pre-1998	0 37	38	11	12	0 15	63	0	0	0 59	15	0 17	0 477	0 806	-336	-250	0 378	110	0 464	0	0	0	0	0	1,918	0
City of Palo Alto Utilities	0	0	0	0	15	0.0	0	0	0	0	0	4//	000	-336	-250 0	0	0	404	16	16	101	74	27	234	
City of Santa Clara Electric Utility	0	0	ō	0	0	ō	ō	ō	0	0	0	0	ō	0	0	ō	0	0	0	2	34	14	4	54	
City of Pasadena Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	0	84	
City of Burbank Water and Power City of Anaheim Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0 141	3 84	0 35	7 261	
City of Redding Electric Utility	0	0	ő	ő	ő	o	ő	ő	ő	ő	ő	ő	Ö	Ö	0	ő	ő	Ö	0	0	0	2	0	2	
City of Glendale Water and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	19	
City of Riverside Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150 0	15 54	214	379 93	
City of Roseville Electric Pacific Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0 10	54 9	29 0	93 19	
City of Alameda Power and Telecom	0	o	ő	0	0	o	o	o	o	o	o	Ö	Ö	0	Ö	Ö	0	4	0	0	0	1	0	5	
City of Ukiah Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	7	
City of Lodi Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	
Sacramento Municipal Utility District	0	0	0	1.230	1.230	2.460	2.460	2.460	2.460	2.460	2.460	2.483	2.978	3.653	4.214	4.635	5.040	5.276	6.496	7.942	9,621	11.011	11.322		
California Energy Commission*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	800	1,526	5,562	13,670	23,355		
Los Angeles Department of Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	534	1,123	3,696	7,281		
California Public Utilities Commission* Pacific Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,859 1,671	6,497 3,796		
Southern California Edison	0	0	ő	ő	ő	o	ő	ő	ő	ő	ő	ő	Ö	Ö	0	ő	ő	Ö	0	0	0	114	1,665		
San Diego Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	1,036		
***Southern California Gas Company Pre-1998	0 37	0 75	0 86	0 98	0 112	0 175	0 175	0 179	0 238	0 253	0 270	0 747	0 1,552	0 1,216	0 966	0 1.345	0 1,454	0 1,918	0 1,918	0 1,918	0 1.918	0 1,918	0 1,918		
City of Palo Alto Utilities	0	0	0	90	0	0	0	0	236	253	2/0	0	0	1,216	900	1,345	1,454	0 0	1,916	32	133	207	234		
City of Santa Clara Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	36	50	54		
City of Pasadena Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84 7	84		
City of Burbank Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4			7		
City of Anaheim Public Utilities	0	0	0	0												-			()	0			261		
City of Anaheim Public Utilities City of Redding Electric Utility	0	0	0	0	0	0	0	0	0	ō	0	0	0	0	0	0	0	0	0	0	141	225 2	261 2		
City of Redding Electric Utility City of Glendale Water and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ō	ō	ō	0	0	141 0 0	225 2 19	2 19		
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0	0 0 0	0	0	0	0	0	0	0	0	0	0	141 0 0 150	225 2 19 165	2 19 379		
City of Redding Electric Utility City of Glendale Water and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ō	ō	ō	0	0	141 0 0	225 2 19	2 19		
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 4	0 0 0 9 0 4	0 0 0 9 0 4	141 0 0 150 9 10 4	225 2 19 165 63 19 5	2 19 379 93 19 5		
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Public Utilities	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 4	0 0 0 9 0 4	0 0 0 9 0 4	141 0 0 150 9 10 4	225 2 19 165 63 19 5	2 19 379 93 19 5		
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 4	0 0 0 9 0 4	0 0 0 9 0 4	141 0 0 150 9 10 4	225 2 19 165 63 19 5	2 19 379 93 19 5		
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Ukiah Public Utilities City of Lod	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166		
City of Reading Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Utah Public Utilities City of Lodi Electric Utility Total Other	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Ukiah Public Utilities City of Lod	0 0 0 0 0 0 0 0 0 0 37 37	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Roseville Electric City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lodin Public Utilities City of Lodi Electric Utility Total Other TOTAL Cumulative Total	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lodi Public Utilities City of Utah Public Utilities City of Utah Total Total Other TOTAL Cumulative Total	0 0 0 0 0 0 0 0 0 0 0 0 37 37	0 0 0 0 0 0 0 0 0 0 0 75	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Reading Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roverside Public Utilities City of Roverside Electric Pacific Power City of Aliameda Power and Telecom City of Aliameda Power and Telecom City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 7 37 37	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Roseville Electric City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lodin Public Utilities City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range	0 0 0 0 0 0 0 0 0 0 0 37 37 1981- 2,698	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Reading Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roverside Public Utilities City of Roverside Electric Pacific Power City of Aliameda Power and Telecom City of Aliameda Power and Telecom City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range	0 0 0 0 0 0 0 0 0 0 0 0 37 37 37 1981- 1989 2,698	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SDG&E	0 0 0 0 0 0 0 0 0 0 0 0 37 37 37 1981- 1989 2,698	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alarmeda Power and Telecom City of Alarmeda Power and Telecom City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City of Redding Electric Utility City of Glendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lodi Electric Utilities City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SNUID LADWP	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City or Redding Electric Utility City of Slendale Water and Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Idain Public Utilities City of Utalia Public Utilities City of Lod Electric Utility Total Other TOTAL Cumulative Total PG&E SCE SDG&E SMUD	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 11 86	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4	0 0 9 0 4 0 0 33	0 0 0 9 0 4 0 0 51	141 0 0 150 9 10 4 0 4 491	225 2 19 165 63 19 5 6 4 855	2 19 379 93 19 5 7 4 1,166	51,538	
City or Redding Electric Utility City of Clendale Water and Electric City of Roseville Electric City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Idain Public Utilities City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 1,242 1,328	0 0 0 0 0 0 0 0 0 0 15 1,342	0 0 0 0 0 0 0 0 0 0 1,293 2,635	0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 4 2,639	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 7 5 2,713	0 0 0 0 0 0 0 0 0 2,730	500 3,230	0 0 0 0 0 0 0 0 0 0 4,530	339 4,869	0 0 0 0 0 0 0 0 0 0 5,180	799 5,980	0 0 0 0 0 0 0 0 0 0 5 515 6,494	0 0 0 0 4 4 0 0 4 885 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	0 0 0 9 0 4 0 0 51 2,622 11,971	141 0 0 150 9 10 4 4 91 6,744 18,715	225 2 19 165 63 19 5 6 4 855 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	
City or Redding Electric Utility City of Redding Electric City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Alameda Power and Telecom City of Lameda Power and Telecom City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State The Rest of the State	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 1,242 1,328	0 0 0 0 0 0 0 0 0 0 0 15 1,342	0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 2,639	0 0 0 0 0 0 0 0 0 0 0 0 0 2,698	0 0 0 0 0 0 0 0 0 0 2,713	0 0 0 0 0 0 0 0 0 2,730	500 3,230	0 0 0 0 0 0 0 0 0 1,301 4,530	0 0 0 0 0 0 0 0 0 4,869	0 0 0 0 0 0 0 0 0 0 5,180	799 5,980	0 0 0 0 0 0 0 0 0 0 515 6,494	0 0 0 0 4 4 0 4 4 885 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	0 0 0 9 9 0 4 0 51 2,622 11,971	141 0 0 150 9 9 10 4 0 4 4 491 6,744 18,715	225 2 19 165 63 319 5 6 4 855 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	
City or Redding Electric Utility City of Clendale Water and Electric City of Roseville Electric City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Idain Public Utilities City of Lodi Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 1,242 1,328	0 0 0 0 0 0 0 0 0 0 15 1,342	0 0 0 0 0 0 0 0 0 0 1,293 2,635	0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 4 2,639	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 7 5 2,713	0 0 0 0 0 0 0 0 0 2,730	500 3,230	0 0 0 0 0 0 0 0 0 0 4,530	339 4,869	0 0 0 0 0 0 0 0 0 0 5,180	799 5,980	0 0 0 0 0 0 0 0 0 0 5 515 6,494	0 0 0 0 4 4 0 0 4 885 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	0 0 0 9 0 4 0 0 51 2,622 11,971	141 0 0 150 9 10 4 4 91 6,744 18,715	225 2 19 165 63 19 5 6 4 855 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	
City or Redding Electric Utility City of Sendale Water and Electric City of Riverside Public Utilities City of Riverside Public Utilities City of Roseville Electric Pacific Power City of Alarmeda Power and Telecom City of Load Public Utilities City of Load Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State California Energy Commission California Public Utilities Commission	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 1,242 1,328	0 0 0 0 0 0 0 0 0 0 15 1,342	0 0 0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 2,639	0 0 0 0 0 0 0 0 0 0 2,698	0 0 0 0 0 0 0 0 0 0 2,713	0 0 0 0 0 0 0 0 0 2,730	0 0 0 0 0 0 0 0 0 3,230	1,301 4,530	0 0 0 0 0 0 0 0 0 0 4,869	0 0 0 0 0 0 0 0 0 0 0 5,180	799 5,980	0 0 0 0 0 0 0 0 0 0 0 6,494	0 0 0 0 4 4 0 0 4 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	0 0 0 9 0 4 0 51 2,622 11,971	141 0 0 150 9 10 4 0 4 491 6,744 18,715	225 2 19 165 63 19 5 6 4 455 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	
City or Redding Electric Utility City of Redding Electric Utility City of Rowerside Public Utilities City of Rowerside Public Utilities City of Roseville Electric Pacific Power City of Alameda Power and Telecom City of Lisha Public Utilities City of Loai Electric Utility Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State California Energy Commission California Public Utilities Commission California Public Utilities Commission Number of Systems	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1984 1,328 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 1,342 1,342 0 0	0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 2,639	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 2,713	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,301 4,530	339 4,869	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 4 0 0 4 885 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	2000 2000 10,445 1,526	141 0 0 0 150 9 10 4 0 4 4 91 18,715	225 2 19 165 63 19 5 6 4 855 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	
City of Redding Electric Utility City of Sendale Water and Electric City of Riverside Public Utilities City of Riverside Public Utilities City of Roseville Electric City of Nameda Power and Telecom City of Load February Total Other TOTAL Cumulative Total Total by Year Range PG&E SCE SDG&E SMUD LADWP The Rest of the State California Energy Commission California Public Utilities Commission	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 1,242 1,328	0 0 0 0 0 0 0 0 0 0 15 1,342	0 0 0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 2,635	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 2,698	0 0 0 0 0 0 0 0 0 0 2,713	0 0 0 0 0 0 0 0 0 2,730	0 0 0 0 0 0 0 0 0 3,230	1,301 4,530	0 0 0 0 0 0 0 0 0 0 4,869	0 0 0 0 0 0 0 0 0 0 0 5,180	799 5,980	0 0 0 0 0 0 0 0 0 0 0 6,494	0 0 0 0 4 4 0 0 4 7,379	0 0 0 9 0 4 0 0 33 1,971 9,350	0 0 0 9 0 4 0 51 2,622 11,971	141 0 0 150 9 10 4 0 4 491 6,744 18,715	225 2 19 165 63 19 5 6 4 455 14,294 33,009	2 19 379 93 19 5 7 4 1,166 18,529 51,538	51,538	

Grid-Connected PV Systems Installed in California

YEAR

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003**	Total	
Program																									
Sacramento Municipal Utility District	0	0	0	1	0	1	0	0	0	0	0	6	56	124	113	62	17	37	211	134	306	0	68	1,136	
California Energy Commission*	ō	ō	Ö	0	Ō	0	Ō	0	Ō	0	Ō	ō	0	0	0	0	0	41	180	215	1,238	2,226	2,079	5,979	
Pacific Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	127	125	650	1,309	1,227	•	3,465
Southern California Edison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	47	59	311	585	515		1,531
San Diego Gas and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	31	275	332	332		976
Bear Valley Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5		7
Los Angeles Department of Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
California Public Utilities Commission*																					0	9	27	36	
Pacific Gas and Electric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	27		36
Southern California Edison		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
San Diego Gas and Electric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
***Southern California Gas Company	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Pre-1998	2	2	4	4	6	16	0	1	4	1	2	-3	-45	-118	-108	-52	-7	37	0	0	0	0	0	-254	
City of Palo Alto Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	28	22	12	72	
City of Santa Clara Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Pasadena Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Burbank Water and Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	3	
City of Anaheim Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	13	12	33	
City of Redding Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Glendale Water and Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Riverside Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	2	8	
City of Roseville Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pacific Power	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Alameda Power and Telecom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Ukiah Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Lodi Electric Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	2	2	4	5	6	17	0	1	4	1	2	3	11	6	5	10	10	115	396	356	1,580	2,277	2,200	7,013	
Cumulative Total	2	4	8	13	19	36	36	37	41	42	44	47	58	64	69	79	89	204	600	956	2,536	4,813	7,013		

NOTES

Numerous utilities have not yet provided the data to determine how many systems were installed per year.

Pre-1998 Row: These numbers were derived by subtracting the total number of systems installed by SMUD each year from the totals contained in Appendix A of the 2001 EPRI Report titled *California Renewable Technology Market and Benefits Assessment.* In some years, there is a negative number. This obviously did not happen. To be consistent with the EPRI data, it was decided to keep the negative number rather than make more assumptions.